# EXHIBIT C

## UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC, Petitioner,

v.

SINGULAR COMPUTING LLC, Patent Owner.

Case No. IPR2021-00155 Patent No. 10,416,961

PETITION FOR INTER PARTES REVIEW UNDER 35 U.S.C. §§ 311-319 AND 37 C.F.R. § 42.1 et seq

### **APPENDIX LISTING OF EXHIBITS**

Exhibit	Description
1001	U.S. Patent No. 10,416,961
1002	Prosecution History of U.S. Patent No. 10,416,961
1003	Declaration of Richard Goodin
1004	Curriculum Vitae of Richard Goodin
1005	U.S. Patent Appl. 12/816, 201 ("'201 Application")
1006	U.S. Patent Appl. Publ. No. 2010/0325186 A1 ("Bates-2010")
1007	U.S. Patent App. Publ. No. 2007/0203967 ("Dockser")
1008	Tong et. al. Reducing Power by Optimizing the Necessary
	Precision/Range of Floating-Point Arithmetic, IEEE Transactions on
	Very Large Scale Integration (VLSI) Systems, Vol. 8, No. 3, June 2000
	("Tong") (from pages 6-19 of the Declaration of Gerard P. Grenier, Ex.
	1025).
1009	U.S. Patent No. 5,689,677 ("MacMillan")
1010	U.S. Patent Appl. Publ. No. 2007/0266071 ("Dockser-Lall")
1011	U.S. Patent No. 6,065,209 ("Weiss")
1012	Gaffar et. al, Unifying Bit-width Optimization for Fixed-Point and
	Floating-Point Designs, 12th Annual IEEE Symposium on Field-
	Programmable Custom Computing Machines, April 20-23, 2004
	("Gaffar") (from pages 22-31 of the Declaration of Gerard P. Grenier,
	Ex. 1028)
1013	European Patent Appl. Publ. No. 0 632 369 A1 ("Hekstra")
1014	U.S. Patent No. 5,375,084 ("Begun")
1015	U.S. Patent No. 4,933,895 ("Grinberg")
1016	U.S. Patent No. 5,442,577 ("Cohen")
1017	U.S. Patent Appl. Publ. No. 2003/0028759 ("Prabhu")
1018	U.S. Patent No. 5,790,834 ("Dreyer")
1019	U.S. Patent Appl. Publ. No. 2009/0066164 ("Flynn")
1020	U.S. Patent No. 5,666,071 ("Hawkins")
1021	A Matter of Size: Triennial Review of the National Nanotechnology
	Initiative (National Academies Press 2006), pages 15-44, 99-109
1022	Transcript of YouTube video on Practical Approximate Computing at
	University of California, Berkeley, March 2016 ("Bates transcript"),
	video available at https://www.youtube.com/watch?v=aHkWX3QctkM
	(last accessed Sep. 16, 2020)
1023	U.S. Patent No. 6,311,282 ("Nelson")
1024	U.S. Patent No. 4,583,222 ("Fossum")

1025 Declaration of Gerard P. Grenier regarding Tong et. al, Reducing Power by Optimizing the Necessary Precision/Range of Floating-Point Arithmetic, IEEE Transactions on Very Large Scale Integration (VLSI) Systems, Vol. 8, No. 3, June 2000  1026 Moshnyaga, Energy Reduction in Queues and Stacks by Adaptive Bitwidth Compression, Proceedings of the 2001 International Symposium on Low Power Electronics and Design, Aug. 6-7, 2001 ("Moshnyaga"), with IEEE Xplore information appended  1027 Simunic, Energy-Efficient Design of Battery-Powered Embedded Systems, IEEE Transactions on Very Large Scale Integration (VLSI) Systems, Vol. 9, No. 1, Feb. 2001 ("Simunic"), with IEEE Xplore information appended  1028 Declaration of Gerard P. Grenier regarding Gaffar et. al, Unifying Bitwidth Optimization for Fixed-Point and Floating-Point Designs, 12th Annual IEEE Symposium on Field-Programmable Custom Computing Machines, April 20-23, 2004  1029 U.S. Patent Appl. Publ. No. 2007/0033572 ("Donovan")  1030 U.S. Patent No. 5,623,616 ("Vitale")  1031 David A. Patterson and John L. Hennessy, Computer Organization and Design (Morgan Kaufmann 3rd ed. Revised 2007) ("Patterson"), pages 189-217  1032 First Amended Complaint in Singular Computing LLC v. Google, LLC, 1-19-cv-12251 (D. Mass.), (Dkt. No. 37)  1034 Memorandum in Support of Motion to Dismiss for Failure to State a Claim (Dkt. No. 41)  1035 Plaintiff's Opposition to Defendant's Rule 12(b)(6) Motion to Dismiss for Lack of Patentable Subject Matter, Singular Computing LLC v. Google, LLC, 1-19-cv-12251 (D. Mass.), Dkt. No. 44  1036 Memorandum and Order on Defendant's Motion to Dismiss (Dkt. No. 51)  1037 Plaintiffs' Preliminary Patent-Related Disclosures Pursuant to Patent L.R. 16.6(d)(1)(A)  Scheduling Order for Singular Computing LLC v. Google, LLC, 1-19-cv-12551 (D. Mass.), (Dkt. No. 59)  1039 Transcript of Scheduling Conference held on July 24, 2020		
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<ul> <li>U.S. Patent No. 5,623,616 ("Vitale")</li> <li>David A. Patterson and John L. Hennessy, Computer Organization and Design (Morgan Kaufmann 3<sup>rd</sup> ed. Revised 2007) ("Patterson"), pages 189-217</li> <li>First Amended Complaint in Singular Computing LLC v. Google, LLC, 1-19-cv-12251 (D. Mass.) (Dkt. No. 37)</li> <li>Docket Report for Singular Computing LLC v. Google, LLC, 1-19-cv-12551 (D. Mass.)</li> <li>Memorandum in Support of Motion to Dismiss for Failure to State a Claim (Dkt. No. 41)</li> <li>Plaintiff's Opposition to Defendant's Rule 12(b)(6) Motion to Dismiss for Lack of Patentable Subject Matter, Singular Computing LLC v. Google, LLC, 1-19-cv-12251 (D. Mass.), Dkt. No. 44</li> <li>Memorandum and Order on Defendant's Motion to Dismiss (Dkt. No. 51)</li> <li>Plaintiffs' Preliminary Patent-Related Disclosures Pursuant to Patent L.R. 16.6(d)(1)(A)</li> <li>Scheduling Order for Singular Computing LLC v. Google, LLC, 1-19-cv-12551 (D. Mass.) (Dkt. No. 59)</li> </ul>	1029	U.S. Patent Appl. Publ. No. 2007/0033572 ("Donovan")
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1040	General Order 20-21, Second Supplemental Order Concerning Jury
	Trials and Related Proceedings, In Re: Coronavirus Public Emergency
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1041	Letter Re Reservation of Rights
1042	Prosecution History of U.S. Patent No. 8,150,902, issued from U.S.
	Patent Appl. No. 12/816,201
1043	Prosecution History of U.S. Patent No. 8,407,273
1044	Prosecution History of U.S. Patent No. 9,218,156
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## CERTIFICATE OF SERVICE UNDER 37 C.F.R. § 42.6 (e)(4)

I certify that on October 30, 2020, I will cause a copy of the foregoing document, including any exhibits or appendices filed therewith, to be served via Priority Mail Express at the following correspondence address of record for the patent:

Blueshift IP LLC 1 Broadway, 14th Floor Cambridge, MA 02142

Date: October 30, 2020

/MacAulay Rush/ MacAulay Rush Paralegal WOLF, GREENFIELD & SACKS, P.C